

ABSTRACT OF THE DISCLOSURE

Apparatuses and methods are disclosed using a fixed abrasive polishing pad to perform mechanical polishing of a surface. The apparatus includes a polishing pad positioned
5 opposing a wafer support to provide for polishing of a surface of a wafer placed on the support. The polishing pad includes a first member having a first polishing surface formed from an abrasive first material that is structurally degradable during polishing. The polishing pad also includes
10 a second member having a second polishing surface formed from a second material that is less degradable and less abrasive relative to said first material. The first and second polishing surfaces define a polishing face that is brought into contact with the surface to be polished. Preferably, a
15 portion of the second member can be removed from the polishing pad so that the first polishing surface extends beyond the second polishing surface to provide for a fixed amount of abrasion using the first member prior to the second member contacting the surface and substantially reducing or
20 stopping the polishing process.